

WE CLAIM:

1. In a pneumatic paintball marker comprising a marker body comprising a back portion and a front portion, the back portion adapted to receive a paintball, the front portion adapted to detachably connect with a barrel to discharge a paintball through the barrel, said barrel comprising a hollow elongated cylindrical tube with an interior diameter, a breech end and comprising a connection means at the breech end and adapted for connection with the front portion of the marker and a paintball discharge muzzle end, the improvement comprising:

10

- o an adaptor having a body with a hollow cylindrical tube and having two threaded ends,

15

- o a marker end adapted for connection with the front portion of the marker and a barrel connection for connection with a universal barrel adapted for detachable connection with said adaptor, said body having an internal diameter equal to the internal diameter of the universal barrel; and

20

- o one or more removable tubular barrel sleeve inserts adapted to be inserted with the adaptor and universal barrel and to extend the entire length within the universal barrel and the adaptor,

25

- o said inserts comprising a hollow elongated tube with an inside diameter and an outside diameter, the outside diameter being slightly smaller than the internal diameter of the universal barrel and adapted to form a continuous path for the projection of a paintball discharged from a paintball marker.

2. The pneumatic paintball marker of claim 1, wherein the inserts have an inside diameter from at least about 0.670 inches to at least about 0.695 inches.

3. In a pneumatic paintball marker comprising a marker body having a back portion and a front portion, the back portion is adapted to receive a paintball, the front portion is adapted to detachably connect with a barrel to discharge a paintball through the barrel, said barrel comprising a hollow elongated cylindrical tube with an interior diameter, a breech end and a connection means at the breech end and adapted for connection with the front portion of the marker and a paintball discharge muzzle end, the improvement comprising:

- an adaptor having a body with a hollow cylindrical tube, a marker end adapted for connection with the front portion of the marker and a barrel connection for connection with a universal barrel adapted for detachable connection with said adaptor, said body having an internal diameter equal to the internal diameter of the universal barrel;
- 5 one or more muzzle extensions comprising a hollow cylindrical body, a discharge end discharge said paintball and a muzzle end adapted for connection with the muzzle end of the universal barrel for detachable connection with said muzzle extensions; and
- 10 one or more removable tubular barrel sleeve inserts adapted to be inserted within the adaptor, and the universal barrel to extend the entire length within the universal barrel, the adaptor, said inserts comprising a hollow elongated cylindrical tube with an inside diameter and an outside diameter, the outside diameter being slightly smaller than the internal diameter of the universal barrel, the adaptor to form a
- 15 continuous path for the projection of a paintball discharged from the paintball marker.
4. The pneumatic paintball marker of claim 3, wherein the inserts have an inside diameter from at least about 0.679 inches to at least about 0.695 inches.
5. The pneumatic paintball marker of claim 3, wherein the muzzle extensions are of various lengths.
- 20 6. A pneumatic paintball kit for use with a pneumatic paintball marker comprising a marker body comprising a back portion and a front portion, the back portion is adapted to receive a paintball, the front portion is adapted to detachably connect with a barrel to discharge a paintball through the barrel, said barrel comprising a hollow elongated cylindrical tube comprising an interior diameter, a breech end and
- 25 comprising a connection means at the breech end and adapted for connection with the front portion of the marker and a paintball discharge muzzle end, the kit comprising:
- (a) a universal barrel comprising a hollow elongated cylindrical tube comprising an interior diameter, a breech end and comprising a connection means at the breech end and adapted for connection with the front portion of the marker and a paintball discharge muzzle end;
- 30 (b) one or more adaptors comprising a body with a hollow cylindrical tube, a marker end adapted for connection with the front portion of the marker and a barrel connection for connection with a universal barrel adapted for detachable connection with said adaptor, said body having an internal diameter equal to the internal diameter of the universal barrel;
- 35

- (c) one or more muzzle extensions comprising a hollow cylindrical body, a discharge end discharge said paintball and a muzzle end adapted for connection with the muzzle end of the universal barrel for detachable connection with said muzzles; and
- 5 (d) one or more removable tubular barrel sleeve inserts adapted to be inserted within the adaptor, and the universal barrel to extend the entire length within the universal barrel, the adaptor, said inserts comprising a hollow elongated cylindrical tube with an inside diameter and an outside diameter, the outside diameter being slightly smaller than the internal diameter of the universal barrel, the adaptor to form a
- 10 continuous path for the projection of a paintball discharged from the paintball marker

wherein the marker end of each of the adaptors is adapted for connection to the breech end of the universal barrel and the muzzle extension is adapted for connection with the discharge muzzle end of the universal barrel and the insert is adapted to be inserted within the adaptor, the universal barrel, to form a continuous path for the projection of a paintball discharged from a paintball marker.

7. The pneumatic kit of claim 6, comprising more than one adaptor, wherein the marker end of each of the adaptors is of different connection types.

20 8. The pneumatic kit of claim 6, wherein the muzzle extensions can be of various lengths.

9. The pneumatic kit of claim 6, wherein each inserts has an inside diameter from at least about 0.670 inches to at least about 0.695 inches.

10. Use of an adaptor with a pneumatic paintball marker comprising a marker body comprising a back portion and a front portion, the back portion adapted to receive a paintball, the front portion adapted to detachably connect with a barrel to discharge a paintball through the barrel, said barrel comprising a hollow elongated cylindrical tube comprising an interior diameter, a breech end and comprising a connection means at the breech end and adapted for connection with the front portion of the marker and a paintball discharge muzzle for use with an adaptor comprising a body with a hollow cylindrical tube, a marker end adapted for connection with the front portion of the marker and a barrel connection for connection with a universal barrel adapted for detachable connection with said adaptor, the internal diameter of said body being equal to the internal diameter of the universal barrel.

11. The use of an adaptor of claim 10, wherein the marker end comprises an external thread adapted for connection with the front portion of the marker to allow for

interchangeability between marker bodies and the barrel end comprises an internal thread that reverse screws into the universal barrel to form a continuous path for the projection of a paintball discharged from a paintball marker.